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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,277	07/30/2001	Ronen Ofek	2681/OJ660	2409
25937	7590	10/17/2005	EXAMINER	
ZARETSKY & ASSOCIATES PC 8753 W. RUNION DR. PEORIA, AZ 85382-6412			PHAN, HANH	
			ART UNIT	PAPER NUMBER
			2638	

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,277

Applicant(s)

OFEK ET AL.

Examiner

Hanh Phan

Art Unit

2638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 08/03/2005.

Claim Objections

2. -In claim 2, line 1, the phrase "The method according to claim 0" should be changed to -- The method according to claim 1--.

-In claim 3, line 1, the phrase "The method according to claim 0" should be changed to -- The method according to claim 1--.

-In claim 4, line 1, the phrase "The method according to claim 0" should be changed to -- The method according to claim 1--.

-In claim 5, line 1, the phrase "The method according to claim 0" should be changed to -- The method according to claim 1--.

-In claim 6, line 1, the phrase "The method according to claim 0" should be changed to -- The method according to claim 1--.

-In claim 7, line 1, the phrase "The method according to claim 0" should be changed to -- The method according to claim 1--.

-In claim 11, line 1, the phrase "The method according to claim 0" should be changed to -- The method according to claim 1--.

-In claim 12, line 1, the phrase "The method according to claim 0" should be changed to -- The method according to claim 1--.

-In claim 13, line 1, the phrase "The method according to claim 0" should be changed to -- The method according to claim 1--.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 14-26 and 27-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

-In claim 14, line 3, the phrase "assigning a virtual color to logical links" is not clear.

-In claim 27, line 3, the phrase "assigning a virtual color to logical links" is not clear.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-5, 7, 8, 10-18, 20, 21, 23-26 and 40-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Chaudhuri (US Patent No. 6,324,162).

Regarding claims 1, 17 and 40, referring to Figure 3, Chaudhuri teaches a method of determining a protection route in a network for links having a wave division multiplexing (WDM) color associated therewith, the method comprising the steps of:

removing from consideration all logical links having a color other than that of the link to be protected to generate a single color logical topology (Chaudhuri teaches the Restoration Path Computing System (RPCS) 20 would consider a channel in the link 14i and then determine the path P_i in which the selected channel belongs. The path terminating nodes for P_i are A_i and Z_i . The RPCS 20 then computes the shortest path P_{ir} between the terminating nodes A_i and Z_i , col. 4, lines 53-67, col. 5, lines 19-29, col. 7, lines 62-67 and col. 8, lines 32-39);

removing from consideration the link to be protected from the single color logical topology (col. 53-67, col. 5, lines 19-29, col. 7, lines 62-67 and col. 8, lines 32-39); and

generating a restoration path for the link to be protected from the single color logical topology only (col. 4, lines 56-67, col. 5, lines 14-36, col. 7, lines 62-67 and col. 8, lines 32-39).

Regarding claims 2 and 15, Kang teaches further comprising the step of configuring one or more nodes in the network in accordance with the restoration path (page 2, paragraphs [0057]-[0065]).

Regarding claims 3 and 16, Chaudhuri further teaches the links share the same optical fiber using WDM (Fig. 3, col. 3, lines 22-25).

Regarding claims 4 and 17, Chaudhuri further teaches the links span more than a single fiber utilizing WDM means (Fig. 3).

Regarding claims 5 and 18, Chaudhuri further teaches the logical topology comprises the topology of the links of the network (col. 4, lines 56-67, col. 5, lines 14-36, col. 7, lines 62-67 and col. 8, lines 32-39).

Regarding claims 7 and 20, Chaudhuri teaches generating the restoration path comprises executing a routing algorithm capable of generating a route based on the single color logical topology (Fig. 3 of Chaudhuri, col. 4, lines 53-67).

Regarding claims 8 and 21, Chaudhuri teaches the routing algorithm is chosen from the group comprising Dijkstra, Breadth First Search (BFS) and Depth Search First (DFS) (i.e., Dijkstra's shortest path algorithm, col. 4 of Chaudhuri, lines 53-67).

Regarding claims 10 and 23, Chaudhuri further teaches the step of configuring comprises utilizing a network-management protocol such as SNMP (Fig. 3 of Chaudhuri).

Regarding claims 11 and 24 and 41, Chaudhuri further teaches the method is implemented in a Network Management System (NMS) (Fig. 3 of Chaudhuri).

Regarding claims 12, 25 and 42, Chaudhuri further teaches the method is implemented in nodes within the network (Fig. 3).

Regarding claims 13, 26 and 43, Chaudhuri further teaches the step of switching traffic to the restoration path associated the link failure in the event of a link failure (Fig. 3).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 9 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chaudhuri (US Patent No. 6,324,162) in view of Kang et al (Pub. No.: US 2002/0089712 A1).

Regarding claims 9 and 22, Chaudhuri teaches all the aspects of the claimed invention except fails to teach the step of configuring comprises utilizing a signaling protocol chosen from the group comprising Reservation Protocol with Traffic Extensions (RSVP-TE) and Constraint based Label Distribution Protocol CR-LDP). However, Kang teaches the step of configuring comprises utilizing a signaling protocol chosen from the group comprising Reservation Protocol with Traffic Extensions (RSVP-TE) and Constraint based Label Distribution Protocol CR-LDP) (page 2, paragraph [0043]). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the step of configuring comprises utilizing a signaling protocol chosen from the group comprising Reservation Protocol with Traffic Extensions (RSVP-TE) and Constraint based Label Distribution Protocol CR-LDP) as taught by Kang in the system of Chaudhuri. One of ordinary skill in the art would have been motivated to do this since Kang suggest in page 2, paragraph [0043] that using such the step of configuring comprises utilizing a signaling protocol chosen from the group comprising Reservation Protocol with Traffic Extensions (RSVP-TE) and Constraint

based Label Distribution Protocol CR-LDP) have advantage of allowing configuring an actual optical path.

Allowable Subject Matter

9. Claims 6 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and overcome the 112 rejection.
10. Claims 27-39 are allowed (if overcome the 112 rejection).

Response to Arguments

11. Applicant's arguments filed 08/03/2005 have been fully considered but they are not persuasive.

The applicant's arguments to claims 1-5, 7-18, 20-26 and 40-43 are not persuasive.

Regarding claims 1 and 14, Applicant argues that the cited reference (Chaudhuri) fails to teach the limitations "**removing from consideration all logical links having a color other than that of the link to be protected to generate a single color logical topology; removing from consideration the link to be protected from the single color logical topology; and generating a restoration path for the link to be protected from the single color logical topology only**" of claims 1 and 14. The examiner respectfully disagrees. Chaudhuri reference teaches removing from

consideration all logical links having a color other than that of the link to be protected to generate a single color logical topology (*Chaudhuri teaches the Restoration Path Computing System (RPCS) 20 would consider a channel in the link 14i and then determine the path P_i in which the selected channel belongs. The path terminating nodes for P_i are A_i and Z_i . The RPCS 20 then computes the shortest path P_{ir} between the terminating nodes A_i and Z_i , col. 4, lines 53-67, col. 5, lines 19-29, col. 7, lines 62-67 and col. 8, lines 32-39*); removing from consideration the link to be protected from the single color logical topology (see col. 53-67, col. 5, lines 19-29, col. 7, lines 62-67 and col. 8, lines 32-39); and generating a restoration path for the link to be protected from the single color logical topology only (see col. 4, lines 56-67, col. 5, lines 14-36, col. 7, lines 62-67 and col. 8, lines 32-39).

Therefore, it is believed that the limitations of claims 1-5, 7-18, 20-26 and 40-43 are still met by the combination of Chaudhuri and Kang and the rejection is still maintained.

Conclusion


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye, can be reached on (571)272-3078. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.


HANH PHAN
PRIMARY EXAMINER